

1 CLAIMS

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3 1. Surface cleaning apparatus for cleaning a sheet
4 material comprising a base unit and a roller
5 cartridge removably insertable into said base
6 unit, said roller cartridge comprising a
7 cleaning roller and a co-operating adhesive
8 roller wherein the respective rollers are
9 mounted for relative movement between (i) a
10 first non-operating position in which the
11 cleaning roller and adhesive roller are
12 separated; and (ii) a second operating position
13 in which the cleaning roller abuts against the
14 adhesive roller; and wherein the base unit and
15 the roller cartridge are each provided with
16 formations adapted to interact to produce said
17 relative movement as the roller cartridge is
18 inserted into and removed from the base unit.

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20 2. Surface cleaning apparatus according to
21 claim 1, wherein the roller cartridge comprises
22 a further opposed cleaning roller having a co-
23 operating adhesive roller, the respective
24 cleaning rollers being adapted for cleaning
25 opposite surfaces of the sheet material.

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27 3. Surface cleaning apparatus according to claim 1
28 or 2, wherein opposing walls extend from the
29 base unit, said walls being adapted to receive
30 and support opposing ends of the roller
31 cartridge.

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- 1 4. Surface cleaning apparatus according any of
2 claims 1 to 3, wherein at least one end of the
3 roller cartridge is provided with a moveable
4 plate comprising at least one cut-out portion,
5 the or each cut-out portion defining a
6 cartridge cam surface adapted to receive a
7 bearing axle of an adhesive roller.
8
- 9 5. Surface cleaning apparatus according to
10 claim 4 when dependent on claim 2, wherein the
11 bearing axles are biased towards each other by
12 a first resilient means.
13
- 14 6. Surface cleaning apparatus according to
15 claims 4 or 5, wherein the moveable plate is
16 slidably mounted for movement between a first
17 position in which separation of the bearing
18 axles is maximised and a second position in
19 which the separation of the bearing axles is
20 minimised; and wherein the moveable plate is
21 biased towards said first position by a second
22 resilient means.
23
- 24 7. Surface cleaning apparatus according to any of
25 claims 4 to 6, wherein the interacting
26 formations are respectively (i) at least one
27 inclined slot formed in at least one wall of
28 the base unit, the or each inclined slot
29 defining a base unit cam surface; and (ii) at
30 least one bearing member projecting from the or
31 each moveable plate of the roller cartridge;

1 the or each bearing member adapted to bear on
2 its corresponding base unit cam surface.

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4 8. Surface cleaning apparatus according to
5 claim 7 when dependent on claim 6, wherein the
6 or each base unit cam surface is adapted to
7 move its corresponding bearing member against
8 the bias of the second resilient means upon
9 progressive insertion of the roller cartridge
10 into the base unit.

11
12 9. Surface cleaning apparatus according to
13 claim 8 when dependent on claim 5, wherein the
14 or each cartridge cam surface allows the first
15 resilient means to move the bearing axles
16 towards their minimum separation upon movement
17 of the moveable plate against the bias of the
18 second resilient means.

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20 10. Surface cleaning apparatus according to any
21 preceding claim, wherein the roller cartridge
22 is adapted to be inserted vertically into the
23 base unit.

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25 11. Surface cleaning apparatus according to any of
26 claims 1 to 9, wherein the roller cartridge is
27 adapted to be inserted horizontally into the
28 base unit.

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30 12. Surface cleaning apparatus according to any of
31 claims 7 to 10, wherein the longitudinal axis
32 of the or each bearing member and the

1 rotational axis of the or each adhesive roller
2 are respectively parallel.

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4 13. Surface cleaning apparatus according to any of
5 claims 7 to 9 and 11, wherein the longitudinal
6 axis of the or each bearing member and the
7 rotational axis of the or each adhesive roller
8 are respectively perpendicular.

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10 14. Surface cleaning apparatus according to any
11 preceding claim comprising a retaining means
12 adapted to releasably retain the cleaning
13 roller and the adhesive roller in the second
14 operating position.

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16 15. Surface cleaning apparatus according to claim
17 14 wherein the retaining means is adapted to
18 release the roller cartridge from its operating
19 position in the event of a power failure.

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21 16. Surface cleaning apparatus according to
22 claim 14 or 15, wherein the retaining means
23 comprises an electromagnet and a magnet.

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25 17. Surface cleaning apparatus according to
26 claim 16, wherein a driving motor is provided
27 to power the apparatus and wherein the
28 electromagnet is selectively activated upon
29 activation of said driving motor.

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31 18. Surface cleaning apparatus according to any of
32 claims 7 to 17, wherein two inclined slots are

1 provided in each wall of the base unit, said
2 slots being laterally offset with respect to
3 each other.